

# Pediatric Summary Report 2015



## Texas EMS & Trauma Registries

### About this report

Data for this report are from the **Injury Epidemiology & Surveillance Branch (IESB)** in the Texas Department of State Health Services. The IESB collects information on all emergency medical services (EMS) runs, trauma hospitalization discharges, and submersions as described in Title 25, Chapter 103 of the Texas Administrative Code. These data are collected and stored in the **EMS & Trauma Registries (ETR)** run by the IESB.

### Note

In this report, “pediatric” refers to children 14 years and younger. The information presented here is 2015 EMS runs, trauma hospitalizations, and submersions reported to the ETR by September 2, 2016. **The ETR is not population-based, and the results should not be interpreted as a full accounting of pediatric EMS runs, trauma hospitalizations, or submersions.**

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For more information:

<http://www.dshs.texas.gov/injury/>

### Reportable events included in this document

**EMS Runs** – All EMS runs are to be reported. A run is an action resulting from a call for assistance where an EMS provider is dispatched to, responds to, provides care to, or transports a person.

**Trauma Hospitalizations** – Hospitalizations meeting the following inclusion criteria are to be reported. 1. A traumatic injury with a qualifying injury diagnosis code\*, AND, 2. At least one of the following: admitted to a hospital inpatient setting (for more than 48 hours), or died after receiving any evaluation or treatment or was dead on arrival, or transferred into or out of the hospital.

**Submersions** – Submersion is the process of experiencing respiratory impairment from submersion/immersion in liquid. Submersions are to be reported by hospitals, physicians who do not have a hospital reporting for them, justices of the peace, medical examiners, and local health departments.

\*Reportable diagnosis codes are specified in Title 25, Chapter 103 of the Texas Administrative Code.

### Child injuries are preventable

Injuries are the leading cause of morbidity and mortality among children in the United States<sup>1</sup>. In 2015, injury was the leading cause of death for Texas children 1 to 14 years old, accounting for 433 (45%) of 970 deaths in this age group<sup>2</sup>; three-quarters of these deaths were due to unintentional injuries, with motor vehicle crashes, drowning, and suffocation the leading causes.

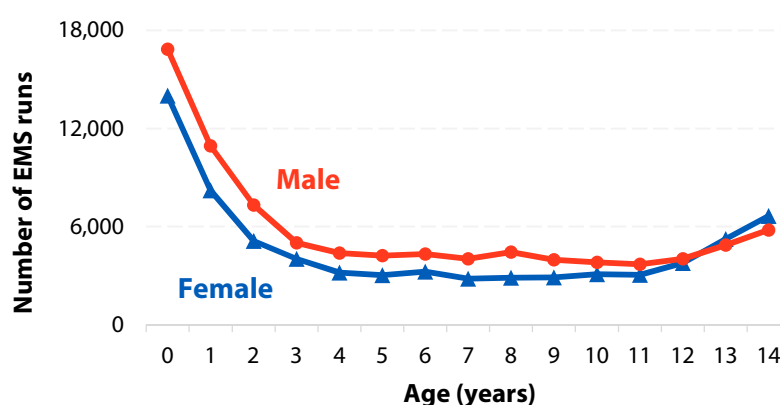
### EMS service requested

There were 161,362 pediatric EMS runs, which comprised 5% of all EMS runs reported for 2015. 58% of reported pediatric EMS runs were 911 responses, and 30% were for transport.

Service requested	Number of runs (%)
911 response	92,987 (58%)
Transport	50,665 (31%)
Unknown or missing	16,041 (10%)
All other services	4,731 (3%)

### EMS calls by age and gender

EMS runs reported are most numerous for infants and toddlers. Among runs reported with male or female sex indicated, 55% (n=87,620) were male and 45% (n=71,169) female. At most ages, males have more EMS runs. However, for ages 13 and 14 years, females had more runs reported than males.



### EMS calls by leading causes of injury

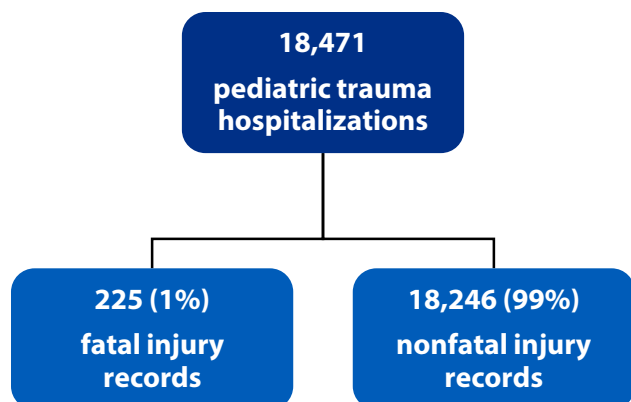
21,940 pediatric EMS runs had external cause of injury codes, making it possible to classify injuries by cause and intent. The most common causes of injury were motor vehicle traffic and falls. Most of these reported pediatric EMS runs were for unintentional injuries. These data should not be interpreted as representative of pediatric injuries in Texas overall.

Cause of injury	Intent of injury			
	Unintentional	Self-inflicted	Assault	Undetermined and Other
Motor vehicle traffic	7,410	0	0	0
Fall	6,748	*	0	102
Natural/environmental	1,443	0	0	0
Struck by/against	839	0	306	*
Cut/pierce	373	65	35	91
All other EMS runs	2,377	922	527	701

\*Count has been suppressed to protect patient confidentiality.

### Trauma hospitalizations by outcome

Of 18,471 pediatric trauma hospitalizations reported to the ETR, 1% indicated a fatality had occurred.

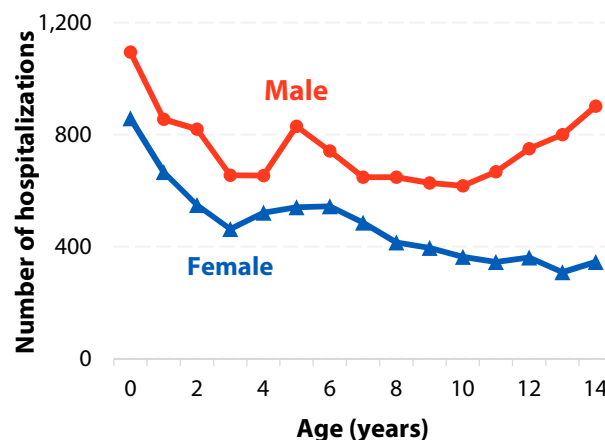


### Trauma hospitalizations by injury severity

The injury severity score (ISS) is a composite score based on injuries to different areas of the body. ISS correlates with mortality, morbidity, length of hospitalization, and other measures of injury severity<sup>3</sup>. Scores >15 are considered major traumas. These data should not be interpreted as representative of pediatric traumatic injuries in Texas overall.

### Trauma hospitalizations by age and gender

61% of trauma hospitalization records were for males (n=11,308 vs. n=7,157 for females), and the number of records for males exceeded those for females at every age. The largest number of trauma hospitalizations were for children <1 year of age.



Outcome	Injury severity score (ISS)		
	1-9	10-15	>15
Nonfatal	14,801	1,064	963
Fatal	133	6	61

### Trauma hospitalizations by leading causes of injury

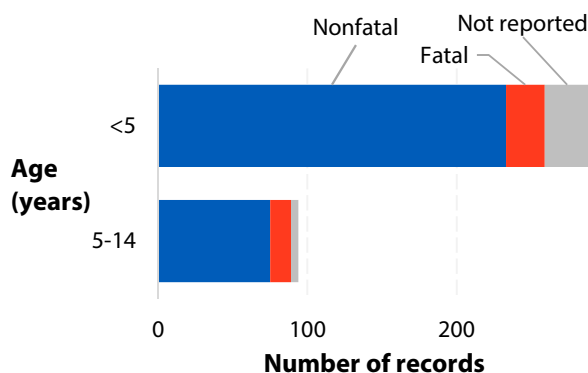
17,035 pediatric trauma hospitalization records had valid ICD-9-CM or ICD-10-CM external cause of injury codes, making it possible to classify the reported injuries by cause and intent. The most common cause of injury among reported pediatric trauma hospitalizations were falls and motor vehicle traffic. These data should not be interpreted as representative of pediatric traumatic injuries in Texas overall.

Cause of injury	Intent			
	Unintentional	Self-inflicted	Assault	Undetermined and Other
Fall	8,080	*	*	15
Motor vehicle traffic	2,540	0	0	0
Struck by/against	1,458	0	73	*
Fire/burn	893	*	*	17
Other transport	868	0	0	0
All other causes	2,462	51	453	108

\*Count has been suppressed to protect patient confidentiality.

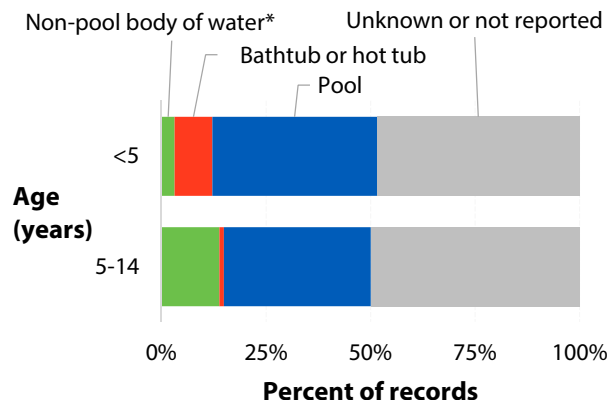
## Submersions by age and outcome

There were 383 pediatric submersion events reported to the ETR for 2015. 40 were fatal<sup>4</sup>, 308 were nonfatal, and 35 had no outcome information. There were 289 submersion reports for children <5 years and 94 reports for children 5-14 years. These data should not be interpreted as representative of pediatric submersions in Texas overall and only reflects those submersions reported to the ETR.



## Submersions by incident scene

Of the 196 records with scene information, 75% (147) indicated a pool as the submersion scene. The next most common scene was a bathtub for children <5 years and a non-pool body of water for children 5-14 years.



\*Non-pool bodies of water include streams, ponds, lakes, bays, and ocean.

## Injury Epidemiology & Surveillance Branch

The mission of the Injury Epidemiology & Surveillance Branch is to improve the health of Texans by reducing the occurrence of preventable injuries, the leading cause of mortality among Texans under age 45 and a major source of morbidity at all ages. To fulfill this mission, we work to continually improve the surveillance of reportable events through the use of the EMS & Trauma Registries and other data sources; assess Texas' EMS and trauma care systems by utilizing epidemiological principles and public health best practices; and, share knowledge through data dissemination, presentations, and reports for the benefit of public health.



**TEXAS**  
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**References** 1. Borse NN, Gilchrist J, Dellinger AM, Rudd RA, Ballesteros MF, Sleet DA (2008) CDC Childhood Injury Report: Patterns of Unintentional Injuries among 0-19 Year Olds in the United States, 2000-2006. Atlanta (GA): Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. 2. Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2015 on CDC WONDER Online Database, released December, 2016. Data are from the Multiple Cause of Death Files, 1999-2015, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/ucd-icd10.html> on Mar 28, 2017. 3. Baker SP, O'Neill B (1976) The injury severity score: an update. The Journal of Trauma. 16(11):882-885. 4. CDC's WONDER Online Database reports 76 fatal submersions among Texas residents age 0-14 years in 2015.

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